## REMARKS/ARGUMENTS

This amendment and response is being submitted on January 15, 2004 . A response to paper No. 5, mailed July 23, 2003 was originally due on October 23, 2003. Filed herewith is a request for a three month extension of time, with the appropriate fee. Thus a response is due on January 23, 2003. Accordingly, this response is timely filed. Applicants respectfully request the amendment and response submitted herewith be made of record in the present application.

Filed with this response is a copy of the Power of Attorney, a statement under 37 CFR 3.37(b) and copies of the assignments. These papers were filed on January 15, 2004, and should be of record. A copy is provided for the Examiner, in case the originally filed papers have not been made of record.

*Claim Status*

Claims 1-27 are pending in the application. The claims have been amended to recite "biaxially texture" where "texture" was recited before. Support for this amendment is found throughout the specification as filed. No new matter has been added, and entry is respectfully requested.

*Specification*

The abstract was objected to as being insufficient. Submitted with this response is an amended abstract. Support for this amendment is found in the specification at page 4, paragraph no.3. No new matter is added, and entry is respectfully requested. Applicants respectfully submit that the abstract as amended overcomes the objection, and withdrawal is requested.

The office action objects to the specification because allegedly there is improper incorporation of essential material by reference. Specifically, the office action objects to the incorporation of "a foreign application or patent, or publication"; and "there is no indication what aspect of topic of these very long list of references is of interest or why, with all of each reference being incorporated"; and it is improper to incorporate other references that incorporate references, and most of these references are non-US patent references, none supplied to the files, hence are not available to be checked or reviewed. If any information is essential, the non-US patent references are also improper for that reasons *(sic)*".

In response, Applicants respectfully assert that the information contained in the documents incorporated by reference is not essential material to the present invention. However, in an effort to expedite prosecution, Applicant has amended the specification to delete this material.

## CLAIM REJECTIONS

### *35 U.S.C. §112, 2nd paragraph*

Claims 9, 14-15, 19 and 22 have been rejected under 35 U.S.C. 112, second paragraph, because allegedly they are indefinite for the following reasons (all set forth in paper no. 5, paragraph no. 3):

a. "Claims 9 and 22 require the depth to be about ≥5nm, but it depends from claim 8 and thus contradicts the previously required limitation of depth about ≤ 50nm, so it is uclear if claim 9's range should stop at about 50 nm or not". Applicants respectfully assert that the claim 9 and 22 term is not indefinite. A literal reading of the claims will disclose that the range of claim 9 would stop at less than about 50 nm, and begin at a

depth of at least about 5 nm. This is not unclear, and withdrawal of the rejection is respectfully requested.

b. " claims 9, 14 and 22 are objected to under 37 CFR 1.75(c) as being of improper dependent form for failing to further limit the subject matter of a previous claim....Due to the above range uncertainty, where previously excluded values are included, claims 9 and 22 maybe considered not properly further limiting". Applicants assert in response that because the claim 8 and 9 limitation is clear, the claim 9, 14 and 22 limitations are indeed further limiting.

c. "claim 14 requires 'the surface region to be textured", but this was already required by the independent claim, hence this claim also appears to not further limit, and thus is also uncertain what further limitation it might have been intended to convey". In response, Applicants have cancelled claim 14.

d. in claim 15, " it appears to say that the texture region (which is now a crystal plane) is perpendicular to its self (sic), which is not logical. It might also be indented to mean the crystal plane in the texture surface region is oriented perpendicular to the plane of the textured surface (much more logical). Would—a crystal plane is formed in the textured surface region, which is perpendicularly oriented to the surface of the textured region—supply the intended meaning more clearly? Also, see claim 19". Applicants respectfully assert that the claim as filed is clear. The biaxially textured crystals have a crystal plane, and the surface of the layer has a plane. The claim merely recites that the two claims are perpendicular to one another. The claim is thus clear, and withdrawal of the rejection is respectfully requested.

The Examiner has stated that she affords a broad meaning to the term texture. The Examiner takes note of the specific definition given to "biaxially textured', but notes that this is not used in the claims. MPEP 608.01(o) states that "A term used in the claims may be given a special meaning in the description". Applicant has amended the text of the claims to recite "biaxially textured" where "textured" was previously recited.

*35 U.S.C. §102*

Claims 1, 6, 8-9, 13-14 and 16-17 have been rejected under 35 U.S.C. 102 (b) as allegedly being anticipated by Russo et al. (U.S. Patent No. 5,432,151) as set forth in paper no. 5, paragraph no.6. Applicants respectfully traverse this rejection. In the claims of the present invention, the ion beam is used to "change the composition of the layer". In the patent to Russo et al. (U.S. Patent No. 5,432,151) the ion beam is used to *deposit or form* an intermediate layer. There is a distinction. The office action appears to interpret this distinction as the same (i.e. no distinction) when the office action recites in para. 6, "(thus changing from a first chemical composition to a second as the claimed change does not exclude the addition of material)" would be valid except for the fact that there is no first chemical composition in the process of Russo et al. When the ion beam is used in Russo et al., onto the substrate is deposited an intermediate layer, where there was nothing before. Thus, the process of Russo et al. does not teach Applicant's claimed "exposing a surface region of a layer of a first material". Accordingly, withdrawal of the rejection is respectfully requested.

Claims 1, 6-7 and 10 have been rejected under 35 U.S.C. 102 (b) as allegedly being anticipated by Ouhata et al.(U.S. Patent No. 5,246,741) as set forth in paper no. 5, paragraph no. 10. Applicants have amended the claims to recite that the "texture" is only

"biaxially texture". Ouhata et al. does not teach or fairly disclose Applicants claimed "biaxially texture". Because Ouhata does not teach each and every limitation as recited in Applicant's claims, withdrawal of the rejection is respectfully requested.

Claims 1, 6-9 and 16-17 have been rejected under 35 U.S.C. 102 (b) as allegedly being clearly anticipated by Fossum et al. (U.S. Patent No. 4,776,925) as set forth in paper no. 5, paragraph no. 12. Applicants have amended the claims to recite that the "texture" is only "biaxially texture". Fossom et al. does not teach or fairly disclose Applicants claimed "biaxially texture". Because Fossom et al. does not teach each and every limitation as recited in Applicant's claims, withdrawal of the rejection is respectfully requested.

*35 U.S.C. §103(a)*

Claims 2-5 and 15 have been rejected under 35 U.S.C. 103 (a) as allegedly being unpatentable over Russo et al. (U.S. Patent No. 5,432,741) as set forth in paper no. 5, paragraph no. 6. Applicants respectfully traverse this rejection. The process of Russo et al. U.S. Patent No. 5,432,151 does not teach that claimed in the present invention for the reasons explained above under the section heading 102 rejections. Because the process of the present invention is patently distinct, the dependent claims are also patentable. Withdrawal of this rejection is respectfully requested.

Claims 10, 18-22 and 25-27 have been rejected under 35 U.S.C. 103 (a) as allegedly being unpatentable over Russo et al. (U.S. Patent No. 5,432,151) as applied to claims 1-6, 8-9, 13-17 above, and further in view of Do et al. (U.S. Patent No. 6,190,752 B1) or Jiang et al. (U.S. Patent No. 6,498,549 B1) , as set forth in paper no. 5, paragraph no. 9. Applicants respectfully traverse this rejection. The process of Russo et al. U.S.

Patent No. 5,432,151 does not teach that claimed in the present invention for the reasons explained above under the section heading 102 rejections. Because the process of the present invention is patently distinct, the dependent claims are also patentable. Withdrawal of this rejection is respectfully requested

Claims 2-5 8-9, 11-14, 18 and 20-25 have been rejected under 35 U.S.C. 103 (a) as allegedly being unpatentable over Ouhata et al.(U.S. Patent No. 5,246,741) as set forth in paper no. 5, paragraph no. 11. Applicants have amended the claims to recite that the "texture" is only "biaxially texture". Ouhtaa et al. does not teach or fairly disclose Applicants claimed "biaxially texture". Because Ouhata does not teach each and every limitation as recited in Applicant's claims, withdrawal of the rejection is respectfully requested.

Claims 2-5 have been rejected under 35 U.S.C. 103 (a) as allegedly being unpatentable over Fossum et al. (U.S. Patent No. 4,776,925) as set forth in paper no. 5, paragraph no. 13. Claims 1, 6-9 and 16-17 have been rejected under 35 U.S.C. 102 (b) as allegedly being clearly anticipated by Fossum et al. (U.S. Patent No. 4,776,925) as set forth in paper no. 5, paragraph no. 12. Applicants have amended the claims to recite that the "texture" is only "biaxially texture". Fossom et al. does not teach or fairly disclose Applicants claimed "biaxially texture". Because Fossom et al. does not teach each and every limitation as recited in Applicant's claims, withdrawal of the rejection is respectfully requested.

The Examiner asserts that the "publications to Neumuller et al or Iijima et al. (2001/00060402 A1=6,214,772 B1 or PN 5,656,378) have essentially equivalent

teachings to Russo et al for purposes of the above rejection. Belouet and Schoop et al are of further interest, but not prior art".

*Conclusion*

Having overcome all rejections, Applicants respectfully requests that a timely Notice of Allowance be issued in this application. If a telephone conversation will expedite the prosecution of this application, the Examiner is kindly invited to call Applicant's representative at the telephone number listed below.

All fees believed due have been submitted. If Applicant is wrong in this assumption, the PTO is authorized to charge any deficiency to Applicant's account number 120690. The PTO is not authorized to charge the issue fee to this account.

Respectfully Submitted,

C R Nold 1/15/2004

Charles R. Nold
Reg. No. 46,470

Ernest Orlando Lawrence Berkeley
National Laboratory
One Cyclotron Road
MS 90B0104
Berkeley, CA 94720
Telephone No. 510 486-6503